## Annual Report 2012

## Transmission Sector

OMB Control No. 2060-0328
Pending OMB Approval

### Company Information

Company Name: **Kinder Morgan**

Gas STAR Contact: **Thomas Bach**

Title **Director, EHS**

Address: **370 Van Gordon St.**

City: **Lakewood**

State:

Zip: **80228-8304**

Phone: **303-914-7842**

Fax: **303-984-3496**

E-mail: **thomas_bach@kindermorgan.com**

Company Information Updated: **No**

### Activities Reported

**BMP1: Yes** **BMP2: Yes** **BMP3: No** **BMP4: Yes**

Total Methane Emission Reductions Reported This Year: **1,802,817**

Previous Years' Activities Reported: **Yes**

### Period Covered by Report

From: **01/01/2012** To: **12/31/2012**

☑ I hereby certify the accuracy of the data contained in this report.

**Additional Comments**

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BMP1: Directed Inspection and Maintenance at Compressor Stations

**Current Year Activities**

**A. Facility/location identifier information:**

**All**

**B. Leak Summary**

Number of surveys at this facility for reporting period: **9 surveys**

Total number of leaks found this reporting period: **9 found**

Total number of leaks repaired: **9 repaired**

**C. Cost Summary**

Total cost of surveys conducted this reporting period: **$ 0**
Total cost of leak repairs: **$ 639**

**D. Methane Emissions Reduction**

Method Used: **Actual field measurement**
Methane Emissions Reduction: **42 Mcf/year**

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### E. Total Value of Gas Saved

Value of Gas Saved: **$ 210**
$ / Mcf used: **$ 5.00**

### F. Planned Future Activities

Do you plan to survey this facility/location next year? **Yes**

**Previous Years' Activities**

| Year | Total Cost of Surveys ($) | Total Cost of Repairs ($) | Estimated Reductions (Mcf/Yr) | Value of Gas Saved ($) |
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**Additional Comments**

The numbers entered above are for one compressor station surveyed in 2012.

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BMP2: Use of Turbines at Compressor Stations

**Current Year Activities**

**A. Facility/location identifier information:**

**B.Turbine Summary**

Number of turbines installed this reporting period: **0 turbines**
Total cost of turbine installations (equipment and labor): **$ _____**

**B. Reciprocating Summary**

Number of reciprocating engines retired this reporting period: **0 engines**

**D. Equipment Description**

Turbines:

Reciprocating Engines:

**E. Methane Emissions Reduction**

Method Used: **Other**

Data Source: **Not Applicable**

Methane Emissions Reduction: **21,608 Mcf/year**

| Reciprocating Engines Retired | | | Turbines Installed | | |
|---|---|---|---|---|---|
| # Engines Retired of this type | Emission rate per MMcf of fuel used | Fuel consumption (MMcf/hour) | # Turbines Installed of this type | Emission rate per MMcf of fuel used | Fuel consumption (MMcf/hour) |
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**F. Are these emissions reductions a one-year reduction or a multi-year reduction?**

| | | |
|---|---|---|
| One-year | ✓ | Multi-year |

**If Multi-year:**

Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration (BMP 2 has a sunset period of 20 years).

✓ Partner will report this activity annually up to allowed sunset date.

**G. Total Value of Gas Saved**

Value of Gas Saved: **151,256**
$ / Mcf used: **7.00**

**H. Planned Future Activities**

Number of turbines to be installed next year:

Number of reciprocating engines to be retired next year:

**Previous Years' Activities**

| Year | # Turbines Installed | Total Cost * ($) | # Reciprocating Engines Retired | Estimated Reductions (Mcf/Yr) | Value of Gas Saved ($) |
|---|---|---|---|---|---|
| 1993 | 1 | | 0 | 21,608 | 151,256 |

* Total cost of installation (including equipment and labor)

**Additional Comments**

1993 turbine installation; As of 2012 there is 1 year left on the 20 year sunset

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BMP2: Use of Turbines at Compressor Stations

**Current Year Activities**

**A. Facility/location identifier information:**

**Lockport**

**B.Turbine Summary**

Number of turbines installed this reporting period: **2 turbines**
Total cost of turbine installations (equipment and labor): **$ 2,014,560**

**B. Reciprocating Summary**

Number of reciprocating engines retired this reporting period: _____ **engines**

**D. Equipment Description**

Turbines: Replacement of 2 SOLAR turbines on Units 2A and 3A with new SOLAR C-50 15ppm SoLoNOx 50ppm drivers; 6130hp each

Reciprocating Engines:

**E. Methane Emissions Reduction**

Method Used: **Calculation using default**

Data Source: **Not Applicable**

Methane Emissions Reduction: **25,131 Mcf/year**

| Reciprocating Engines Retired | | | Turbines Installed | | |
|---|---|---|---|---|---|
| # Engines Retired of this type | Emission rate per MMcf of fuel used | Fuel consumption (MMcf/hour) | # Turbines Installed of this type | Emission rate per MMcf of fuel used | Fuel consumption (MMcf/hour) |
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**F. Are these emissions reductions a one-year reduction or a multi-year reduction?**

| | | |
|---|---|---|
| One-year | ✓ | Multi-year |
| **If Multi-year:** | ✓ | Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration (BMP 2 has a sunset period of 20 years). |
| | | Partner will report this activity annually up to allowed sunset date. |

**G. Total Value of Gas Saved**

Value of Gas Saved: **175,917**
$ / Mcf used: **7.00**

**H. Planned Future Activities**

Number of turbines to be installed next year:

Number of reciprocating engines to be retired next year:

**Previous Years' Activities**

| Year | # Turbines Installed | Total Cost * ($) | # Reciprocating Engines Retired | Estimated Reductions (Mcf/Yr) | Value of Gas Saved ($) |
|---|---|---|---|---|---|

* Total cost of installation (including equipment and labor)

**Additional Comments**

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BMP4: Partner Reported Opportunities (PROs)

**Current Year Activities**

**A. Facility/location identifier information:**

**Station 260A Southwick MA**

**B. Description of PRO**

Please specify the technology or practice that was implemented:

**Install electric compressors (10 years)**

Please describe how your company implemented this PRO:

**Installation of one 2000 hp electric motor driven booster station**

**C. Level of Implementation**
**Number of units installed: 1 units**

**D. Methane Emissions Reduction**
Methane Emissions Reduction: **4,220 Mcf/year**

Basis for the emissions reduction estimate: **Other**

Calculated using emission factor of 2.11 Mcf/year per horsepower (from PRO Fact Sheet No. 105)

**E. Are these emissions reductions a one-year reduction or a multi-year reduction?**

One-year ✓ Multi-year

**If Multi-year:**

✓ Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration.

Partner will report this activity annually up to allowed sunset date.

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**F. Cost Summary**

Estimated cost of implementing the PRO (including equipment and labor): **$ 14,659,747**

**G. Total Value of Gas Saved**

Value of Gas Saved: **$ 29,540**

$ / Mcf used: **$ 7.00**

**H. Planned Future Activities**

To what extent do you expect to implement this PRO next year?: **see additional comments**

**Previous Years' Activities**

| Year | Frequency of practice/activity or # of Installations | Total Cost * ($) | Estimated Reductions (Mcf/Yr) | Value of Gas Saved ($) |
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* Total cost of practice/activity (including equipment and labor)

**Additional Comments**

2013 PRO implementation: Report gas savings associated with the installation of electric motor driven compression either as new gas compression equipment or for replacement of existing reciprocating internal combustion engine driven gas compression equipment

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BMP4: Partner Reported Opportunities (PROs)

**Current Year Activities**

**A. Facility/location identifier information:**

**Ellerslie #9; Harris County GA**

**B. Description of PRO**

Please specify the technology or practice that was implemented:

**Install electric compressors (10 years)**

Please describe how your company implemented this PRO:

**Installation of 7,000 hp EMD of compression**

**C. Level of Implementation**
**Number of units installed: 1 units**

**D. Methane Emissions Reduction**
Methane Emissions Reduction: **14,770 Mcf/year**

Basis for the emissions reduction estimate: **Other**

Calculated using emission factor of 2.11 Mcf/year per horsepower (from PRO Fact Sheet No. 105)

**E. Are these emissions reductions a one-year reduction or a multi-year reduction?**

✓ One-year Multi-year

**If Multi-year:**

Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration.

Partner will report this activity annually up to allowed sunset date.

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**F. Cost Summary**

Estimated cost of implementing the PRO (including equipment and labor): **$ 16,039,517**

**G. Total Value of Gas Saved**

Value of Gas Saved: **$ 103,390**

$ / Mcf used: **$ 7.00**

**H. Planned Future Activities**

To what extent do you expect to implement this PRO next year?: **see additional comments below**

**Previous Years' Activities**

| Year | Frequency of practice/activity or # of Installations | Total Cost * ($) | Estimated Reductions (Mcf/Yr) | Value of Gas Saved ($) |
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* Total cost of practice/activity (including equipment and labor)

**Additional Comments**

2013 PRO implementation: Report gas savings associated with the installation of electric motor driven compression either as new gas compression equipment or for replacement of existing reciprocating internal combustion engine driven gas compression equipment

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BMP4: Partner Reported Opportunities (PROs)

**Current Year Activities**

**A. Facility/location identifier information:**

**ALL**

**B. Description of PRO**

Please specify the technology or practice that was implemented:

**Reduce/downgrade system pressure**

Please describe how your company implemented this PRO:

**Reduced pressure in pipeline prior to blowdown**

**C. Level of Implementation**

**Other:** 85 times in 2012

**D. Methane Emissions Reduction**

Methane Emissions Reduction: **2,316 Mcf/year**

Basis for the emissions reduction estimate: **Actual field measurement**

**E. Are these emissions reductions a one-year reduction or a multi-year reduction?**

✓ One-year Multi-year

**If Multi-year:**

Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration.

Partner will report this activity annually up to allowed sunset date.

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**F. Cost Summary**

Estimated cost of implementing the PRO (including equipment and labor): **$ _____**

**G. Total Value of Gas Saved**

Value of Gas Saved: **$ 16,978**

$ / Mcf used: **$ 7.33**

**H. Planned Future Activities**

To what extent do you expect to implement this PRO next year?: **Same, as practical**

**Previous Years' Activities**

| Year | Frequency of practice/activity or # of Installations | Total Cost * ($) | Estimated Reductions (Mcf/Yr) | Value of Gas Saved ($) |
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* Total cost of practice/activity (including equipment and labor)

**Additional Comments**

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BMP4: Partner Reported Opportunities (PROs)

**Current Year Activities**

**A. Facility/location identifier information:**

**ALL**

**B. Description of PRO**

Please specify the technology or practice that was implemented:

**Use pipeline pump-down techniques to lower gas line pressure before maintenance**

Please describe how your company implemented this PRO:

**Rented reserve compressors to reinject gas back into system instead of venting to atmosphere**

**C. Level of Implementation**

**Other:** 80 times in 2012

**D. Methane Emissions Reduction**

Methane Emissions Reduction: **1,734,730 Mcf/year**

Basis for the emissions reduction estimate: **Actual field measurement**

**E. Are these emissions reductions a one-year reduction or a multi-year reduction?**

✓ One-year Multi-year

**If Multi-year:**

Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration.

Partner will report this activity annually up to allowed sunset date.

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**F. Cost Summary**

Estimated cost of implementing the PRO (including equipment and labor): **$ 3,145,799**

**G. Total Value of Gas Saved**

Value of Gas Saved: **$ 6,938,920**

$ / Mcf used: **$ 4.00**

**H. Planned Future Activities**

To what extent do you expect to implement this PRO next year?: **Same, as practical**

**Previous Years' Activities**

| Year | Frequency of practice/activity or # of Installations | Total Cost * ($) | Estimated Reductions (Mcf/Yr) | Value of Gas Saved ($) |
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* Total cost of practice/activity (including equipment and labor)

**Additional Comments**

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### Additional Accomplishments